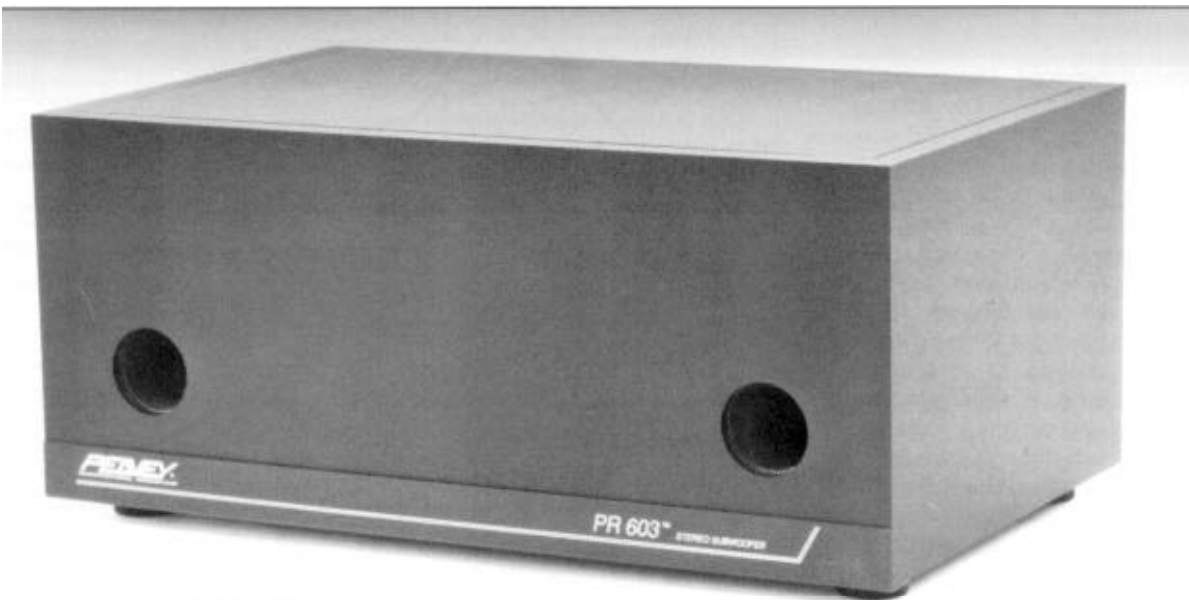


SPECIFICATIONS



PRTM-603 Stereo Subwoofer

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Frequency Response:

50 Hz to 160 Hz \pm 3 dB

Low Frequency Limit (-3 dB point):

50 Hz

Useable Low Frequency Limit (-10 dB point):

44 Hz

Power Handling:

50 watts continuous (20 volts RMS per channel)

100 watts program per channel

Sound Pressure Level 1 Watt at 1 Meter Swept Sine Input in Anechoic Environment:

87 dB, one channel driven

93 dB, both channels driven

Maximum Sound Pressure Level:

109 dB, both channels driven

Transducer Complement:

Two special design 5 $\frac{1}{4}$ " woofers, one each channel

Tuning Frequency (Fbox):

Lower: 65 Hz

Upper: 135 Hz

Crossover Frequency:

180 Hz

Crossover Type:

Passive internal (stereo), in conjunction with the high frequency acoustic roll off of the bandpass enclosure.

Crossover Slope (Electrical):

6 dB/oct (1st order) high and low pass

Impedance (Nominal):

8 ohms

Impedance (Minimum):

7.1 ohms

Input Connections:

Spring loaded slide terminals

High Pass Output:

Spring loaded slide terminals

Enclosure Materials and Finish:

$\frac{3}{4}$ " MDF mitre-fold covered in black vinyl

Mounting:

4 large rubber feet

Dimensions:

21 $\frac{1}{2}$ " (54.7cm) W x 9 $\frac{1}{2}$ " (24.1cm) H x

12 $\frac{7}{8}$ " (32.7cm) D

Optional Accessories:

PR-605 Satellite Speakers (2 required)

Net Weight:

30 lbs.

FEATURES:

- Stereo operation (2 independent channels)
- Built-in stereo crossover with high pass outputs
- High efficiency bandpass design
- Compact dimensions ease placement
- Drivers are tamper-proof
- Bandpass technology reduces distortion
- Monophonic use adds output and power handling

DESCRIPTION

The PRTM-603 Stereo Subwoofer is a two channel bandpass style enclosure with a stereo subwoofer-to-satellite passive crossover built in. The high efficiency bandpass design provides low distortion bass output, driver protection, and results in a cabinet of

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modest dimensions. This state of the art enclosure adds to the versatility and usefulness of the PR-605 speaker by extending and increasing the low frequency output of the system, easing the burden of the satellite speaker in the bass. Efficient enough to match the original PR™-600, the stereo subwoofer is designed for use with the PR-605 in small to moderate installations such as bars, lounges, arcades, taverns, arenas, or anywhere a multi-channel sound system is required. The bandpass enclosure design positions the drivers deep within the cabinet, rendering them tamper-proof — a definite plus in a busy environment.

FREQUENCY RESPONSE

This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the PR-603 subwoofer is measured at 1 meter using a 2.82 volt swept sine input. As shown in Figure 1, the selected drivers in the PR-603 subwoofer combine to give a smooth frequency response from 50 Hz to 160 Hz.

POWER HANDLING

There are many different approaches to power handling ratings, the most common being EIA standard RS-426A. The derived shape of this test spectrum was an attempt to simulate the spectral content of contemporary music. Although it does resemble contemporary music, EIA-RS-426A does not contain the same levels of very low frequency material found in live music situations. Very high levels of low frequency material produce distortion and, ultimately, device failure. The presence of the low frequency material will therefore yield lower device rating than produced by EIA standard RS-426A.

Although the Peavey ratings are lower than those produced by the EIA test spectrum, they are far more reliable and will have a direct correlation to real world situations.

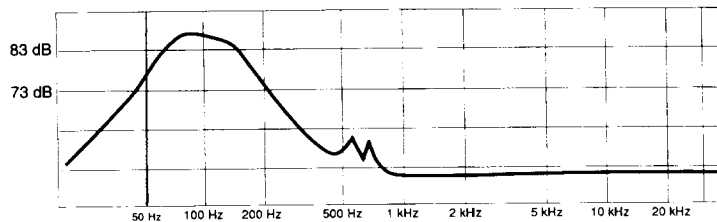


Figure 1. FREQUENCY RESPONSE

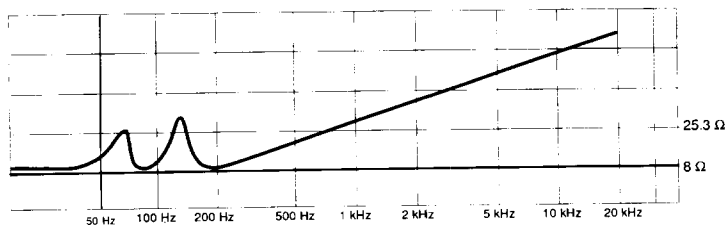
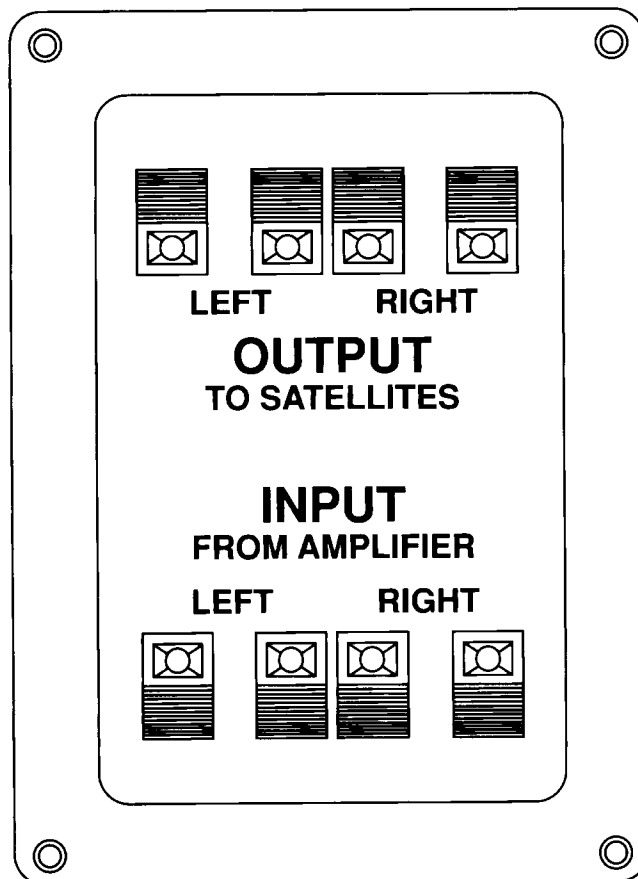


Figure 2. IMPEDANCE



ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 50 Hz to 160 Hz. The output level shall be 87 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The continuous power handling shall be 50 watts, maximum program power of 100 watts, with a minimum amplifier headroom of 3 dB. The outside dimensions shall be 21½" wide by 9½" high by 12⅞" deep. The weight shall be 30 pounds. The loudspeaker system shall be a Peavey Architectural Acoustics model PR-603 Stereo Subwoofer.

CONNECTING SATELLITE SPEAKERS TO THE PR-603 STEREO SUBWOOFER

The PR-603 Stereo Subwoofer facilitates hookup of satellite speakers with its built-in crossover and highpass (satellite) output terminals. The terminals shown as inputs are the full-range inputs when the subwoofer is part of a system with satellites. The terminals shown as outputs are the high pass outputs to the satellite speakers when a full-range signal is fed to the subwoofer inputs.

Speaker Polarity

The input and output terminals are color coded and marked for speaker

polarity. Black is "-", or ground, and red is "+", or hot. Since the position of the satellites will vary with respect to the subwoofer, the polarity of the satellites may need to be reversed for proper bass output. Try reversing the polarity of both satellite channels only, and compare this to the initial hookup. Use the connection that has the most bass. Make sure that both channels are connected the same way when you are done: Either both satellites connected in like polarity with the subwoofer or both satellites connected reverse polarity.

The Speaker Wire

Wire run to the subwoofer should be a minimum of 16 gauge, larger for runs over 50 feet. The wire from the subwoofer to the satellites should be a minimum of 18 gauge for runs up to 50 feet. For satellite runs up to 100 feet, use a minimum of 16 gauge. For runs over 100 feet, a transformer-type 70 volt system, such as the PR™-603T, should be used.

Multiple Speakers

The PR-603 Stereo Subwoofer is designed to be used with a pair of PR-603, 605, or 606 speakers as satellites, creating a 3 piece stereo speaker system. The subwoofer can be used with other 8 ohm speakers as the satellites. For multiple speaker hookups, additional 8 ohm speakers can be connected to one amplifier/receiver. When adding just two more "satellites,"

connect them in the same polarity as the existing satellites **to the full-range signal** so as not to modify the termination of the crossover in the subwoofer and create a "hole" in the bass response. It is possible to add a total of 6 more satellite speakers to the 3 piece system--4 satellites can be wired in series parallel per channel to equal an 8 ohm load, and the group of 4 is connected to the high pass outputs just as one 8 ohm speaker would be. (See Speaker Polarity.) More than a total of 8 satellites **requires** the use of an additional subwoofer, and generally for proper bass output, one subwoofer per 2 satellites works best. It is possible to connect two 3 piece systems to one amplifier/receiver, creating a 4 ohm load for each channel.

Speaker Placement

The output from the subwoofer is primarily omnidirectional and unlocatable, so placement is not critical. It may be placed under a counter, table, or bench; up against a wall; in a corner; or out in the middle of the room. Avoid blocking the ports, as all of the output is from the ports. The satellite speakers are best mounted/ placed up high, away from obstructions or blockage, such as up on a wall away from corners, aimed slightly downward.

LIMITED WARRANTY

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defects in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States.

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